

Chlamydial Life Cycles

EB - Elementary Body (◯)
(Highly infectious, low-metabolism)

RB - Reticulate Body (●)
(Non-infectious, highly metabolic)

EB - adhesion

Exocytosis - EB released

*Strategy: Slow release,
maintain host, hide from
immune system*

Endocytosis
(Phagocytosis)

EB - in vacuole

inhibition of
fusion of lysosome
with phagosome

C. psittaci

EB → RB

Vessicle enlarges
into "inclusion body"

Reticulate bodies divide
by binary fission
within inclusion body

RB → EB

EB - adhesion

Lysis - EB released

*Strategy: Replicate quickly,
Release and Infect*

Endocytosis
(Phagocytosis)

C. pneumoniae

C. trachomatis

EB - in vacuole

inhibition of
fusion of lysosome
with phagosome

EB → RB

Vessicle enlarges
into "inclusion body"

Reticulate bodies divide
by binary fission
within inclusion body

RB → EB

Persistent
Infection

Persistent
Infection